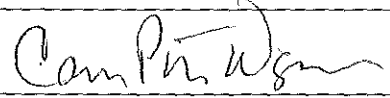


**Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT**

Inspection Date(s):	05/03/2017		
Media:	Water		
Regulatory Program(s)	CWA 308[A][B]		
Company Name:	City of Bedford		
Facility Name:	Public Works Department		
Facility Physical Location:	1813 Reliance Parkway		
(city, state, zip code)	Bedford, Texas 76021		
Mailing address:	1813 Reliance Parkway		
(city, state, zip code)	Bedford, Texas 76021		
County/Parish:	Tarrant		
Facility Contact:	Kenny Overstreet	Public Works Director	
	Kenneth.Overstreet@bedfordtx.gov	817.952.2248	
FRS Number:	110037938916		
Identification/Permit Number:	TXU000145		
Media Number:	NA		
NAICS:	221320		
SIC:	4952		
Personnel participating in inspection:			
David Long	USEPA/6EN-WM	Environmental Scientist	214.665.7323
Mike Tillman	USEPA/6EN-WM	Environmental Scientist	214.665.7531
Scott Tedford	City of Bedford/Public Works	Field Operations Manager	817.952.2220
Dan Mitchell	City of Bedford/Public Works	Utility Manager	817.952.2223
Jerry Laverty	City of Bedford/Environmental	Drainage Manager	817.952.2258
EPA Lead Inspector Signature/Date			12/04/2017
	{Inspector name}		Date
Supervisor Signature/Date			12/5/17
	{Supervisor name}		Date

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

A U.S. Environmental Protection Agency (USEPA) program review inspection was conducted in the City of Bedford Public Works offices located at 1813 Reliance Parkway, Bedford, Texas 76021. The inspection was conducted under the guidelines established by the USEPA under the National Pollutant Discharge Elimination System (NPDES) for wastewater collection systems. The purpose of this inspection was to inspect and review the City of Bedford's current Sanitary Sewer Overflow (SSO) response protocols and their application of a Capacity, Management, Operations and Maintenance (CMOM) program and how the program is used to insure proper operation and maintenance of their collection system. An entry briefing was conducted by EPA-Region 6 inspectors David Long and Mike Tillman at 8:40 a.m. on May 3, 2017 at the City of Bedford Public Works' offices. The inspectors met with Kenny Overstreet, Public Works Director, Scott Tedford, Field Operations Manager, Dan Mitchell, Utility Manager, and Jerry Laverty, Drainage manager. An invitation to Greg Diehl, Inspector with the Texas Commission on Environmental Quality, had also been extended, but he chose not to attend. During the entry briefing, the EPA inspectors provided credentials and explained the purpose of the inspection, as well as set the timeline for the day and verified the availability of documents that had been requested the week before.

At the conclusion of the inspection, an exit briefing was conducted that explained the suggestions and areas of concerns noted during the inspection that are detailed in this report. This report is based on information supplied by the City representatives, observations made by the U.S. EPA inspectors, records and reports maintained by the City, the State of Texas and the USEPA.

PROGRAM DESCRIPTION

The City of Bedford is approximately 10 square miles in size and includes an approximate population of 47,000 with 22,674 total residential and commercial water accounts which are provided wastewater services through approximately 158 miles of sewer lines. The wastewater collection is composed sewer pipes of varying sizes ranging from new to 60 years of age. The City of Bedford's collection system is comprised of mainly PVC with much smaller fractions of vitreous clay, concrete and iron pipe in the southern or older sections of town. The City of Bedford does not have any lift stations and, as a result, the city has not invested in a Supervisor Control and Data Acquisition (SCADA) system, otherwise, 20% of all manholes are physically inspected per year for operational capability.

The City of Bedford collection system has experienced approximately 30 SSOs in the past five years. Problem areas of the collection system lines are jetted and cleaned every 30 days with other "hot spots" monitored more often. The remainder of the system is jetted and cleaned every five years (20%/year). In addition, the City of Bedford has developed and regularly updates a Utility Master Plan to ensure that capacity and condition of the collection system is maintained. Finally, the City of Bedford expends approximately one million dollars per year on their Capital Improvement Plan (CIP) to cover capital improvements, manhole rehabilitation projects, and emergency and planned collection system line maintenance and replacement. To assist in line maintenance, the City of Bedford also utilizes CCTV of

Program but does not use National Association of Sewer Service Companies (NASSCO) certified reviewers to document functional condition of the collection system in each video.

The City of Bedford is a subscriber to the TCEQ Sanitary Sewer Overflow Initiative but has not developed a CMOM following the results of a utility/hydraulic study performed in 2008 which found the collection system to be adequate to handle flows and growth through 2018. The City of Bedford will determine prior to that date whether to continue its' membership in the SSO Initiative and/or develop a CMOM. Finally, the City of Bedford maintains an excellent public outreach and awareness program regarding SSOs and their prevention. Outreach activities include online and in-person events and fairs, door hangers, magazines and mobile grease collection activities after major holidays.

Section II – OBSERVATIONS

Following the review of their SSO Program, the EPA inspectors requested site tours of the City of Bedford's problem manholes and CCTV truck. A review of each of those sites revealed the following observations:

1. **CCTV Mobile Units:** The City of Bedford maintains one CCTV Mobile Unit with a crawler camera(s) capable of viewing sanitary pipes from six to 27 inches in diameter. The unit records well over the required 20% of their collection system each year (20,000 to 30,000 feet per year). Following review of the recorded video, a determination for maintenance or repair is developed and follow-up service is usually dispatched within two weeks.
2. **Manholes:** Manholes are physically visited on an as needed basis (problem areas are visited more often). However, several of the visited manholes were severely impacted by grease which will continue to cause SSO issues in their city until a better form of control or regulations are developed and/or put in place.

Inspector's Note – Photos taken during this inspection were overexposed due to camera malfunction and no Photo Log will be generated.

Section III – AREAS OF CONCERN

At the conclusion of the inspection, the EPA inspectors met with the representatives from the City of Bedford for an exit interview at 12 noon on May 3, 2017. At that time, the inspectors provided details of the inspection and reviewed issues noted in the inspection that might require additional follow-up or correction. These issues included:

1. During the field observations, city personnel had some difficulty in locating manholes which had been selected for review. It was suggested that their GIS Department work with Public Works in developing more accurate maps with the manhole locations.
2. The City of Bedford has experienced some data loss over the past two years due to electronic failure of their data collection system and they should institute better data management techniques and systems to safeguard their collected information.

Section IV – FOLLOW UP

None required at this time

Section V – LIST OF APPENDICES

Appendix 1 – City of Bedford SSO Inspection Checklist

Appendix 2 – City of Bedford Supplied Documents

- A. SSO Inspection Reports
- B. City of Bedford 2008 Sanitary Sewer Condition Assessment
- C. TCEQ SSO Reports 2014 - 2017

Appendix 1
City of Bedford SSO Inspection Checklist

.....

EPA
SSO Inspection Checklist

Name of Municipality City of Bedford, Texas

Collection System Description

1. Describe the collection system. The City of Bedford has 158 miles of sanitary sewer mains varying in age and type of pipe. The system also includes 2,750 manholes.
2. What is the population of the service area:
 - Number of residents 49,151 22,634 total accounts (residential/commercial)
 - Commercial connections 689
 - Any septic systems? Yes If yes, how many? 4
3. How many miles of sanitary sewer mains are in the collection system? 158
4. What is the age of collection system? 0 to 60 years of age
 - %VC ≈ Do not have this data. Heavier VC on south side of town
 - %DI ≈
 - %PVC ≈
 - %Other ≈
5. Does the collection system experience problems during dry weather? No
Describe or provide documentation: _____
6. Does the collection system experience problems during wet weather? Yes
Describe or provide documentation: See attached wastewater flow versus precipitation showing increased flow during rain events.
7. What is your sanitary sewer overflow (SSO) notification procedure? Reporting per TCEQ regulations utilizing form TCEQ-00501 (Rev. 09-07-10) and an internal Sanitary Sewer Overflow reporting form.

What is reported? See enclosed forms for report data.
8. Are all SSOs reported, regardless of size? Yes. If no, why not? _____

EPA
SSO Inspection Checklist

Lift/Pump Stations

1. How many lift stations are in the system? 0
 - How many have backup power sources? _____
 - Describe: _____
2. Describe how pump/lift stations are inspected and monitored? _____
3. Is a SCADA system used? _____ If so, what parameters are monitored? _____
4. What provisions have been made for emergencies? _____
 - Emergency Power? _____
 - Critical Processes? _____
 - SCADA? _____
 - Other? _____
5. Describe any automated emergency notification/response process. _____

Satellite Systems

1. Does the collection system receive flow from satellite systems? Yes
If yes, continue with questions 2-4
2. Is flow from satellite systems monitored? No
If yes, how? _____
3. Describe any known problems with the satellite collection system (hydraulic flow, wastewater concentration, ordinances, etc.)? None
4. Who is responsible for satellite systems, enforcement, and response? City of Hurst for their lines and City of Bedford for our lines.
 - Enforcement? City of Hurst for their lines and City of Bedford for our lines.
 - Response? City of Hurst for their lines and City of Bedford for our lines.

EPA
SSO Inspection Checklist

Performance Indicators

1. Summarize the Capacity, Management, Operations, and Maintenance (CMOM) components utilized by the facility and satellite systems, if applicable: N/A

2. Does the utility participate in the TCEQ Sanitary Sewer Overflow Initiative (SSOi)? Yes
 - If yes, please provide the latest SSOi Annual Report.
 - If no, why not? _____
3. What Standard Operational Procedures (SOP) are developed and used?

• <u>SCADA?</u>	• <u>Valve maintenance?</u>
• <u>X Routine Inspections/Maintenance?</u>	• <u>X Fleet Management?</u>
• <u>X Root Control?</u>	• <u>X Clean-up?</u>
• <u>Lift/Pump Stations?</u>	• <u>Other?</u> _____
4. Has an infiltration & inflow (I/I) analyses or sanitary system evaluation survey been performed? Yes
 - If yes, describe (and provide a copy of any associated reports) A full Wastewater System Evaluation was completed in 2008. An additional evaluation was completed on the 19.1W basin in 2010. See enclosed reports.
 - Smoke Testing? _____
 - Dye Testing? _____
 - X CCTV? Completed in-house for evaluation.
 - X Peaking Factors? Completed in both evaluations and in-house.
 - If not, why not? _____

5. Describe the sewer cleaning and inspection goals. Reduction in I & I, SSOi requirements, system maintenance and repair.
 - X Hot Spots? Monthly cleaning of troubled lines.
 - X Annual Goals? Minimum requirement of 20% of system manholes inspected. Minimum requirement of cleaning 20% of the system. Minimum requirement of video inspection of 14,000 feet of the system.
6. Describe any training for receiving, documenting, and responding to sewer calls.
 - Discharge Estimates? In-house / on the job training.
 - Safety/Confined Space? Confined space training by Texas Municipal League (TML) online in April 2016 and a hands on course through TML on June 8, 2016. In-house training.
 - Lockout/Tagout? N/A
 - Reporting? In-house / on the job training.
 - Treatment/Clean-up? In-house / on the job training.
 - Other? _____

EPA
SSO Inspection Checklist

7. Describe any Asset Management process in place for the collection system. The City completed the development of the data and imagery for the City Geographic Information System (GIS) database in 2011. The GIS database is continually updated as information from field observances is reported.
8. Describe the funding status.
- Emergency Repairs: Budgeted annually in the base budget and also annually in a Utility Repair Fund.
 - Operation & Maintenance: Annual budget.
 - Rehabilitation: Budget money in the Utility Repair Fund annually and also by the sale of Bonds.
 - Rates: _____
 - Other? _____
9. Describe any formal approach to target areas for Capital Improvement Projects. After the collection system evaluation in 2008, it was noted that the 19.1W basin had substantial I & I and was in need of repair/rehab. It was determined at that time, by staff, that the lines in that basin were in need of repair and made it a priority. This area has received substantial rehabilitation, but still has areas of concerns, which staff continues to address.
10. Please provide any other relevant information.

CERTIFICATION

I certify under penalty of law that I have examined and am familiar with the information provided and in any enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true, accurate, and complete.

9-23-16
Date

Kenny Overstreet
Signature
Kenny Overstreet, Public Works Director
Print name and Title

Appendix 2A - City of Bedford Supplied Documents

SSO Inspection Reports

Water Quality Noncompliance Notification

☒ Unauthorized Discharge

☐ Reportable Effluent Violation

☐ Other

General Information

Entity Name: CITY OF BEDFORD

Telephone No: (X) (817) 952-2224

☒ Permittee ☐ Subscriber

TCEQ Region: 4

County: TARRANT

Permit Number*: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume if an unauthorized discharge):

The manhole at 1609 Hospital Park way discharged for approximately 1.5 hour. Put out disinfect Flushed hydrant for 30 min. and odor control. 90 gallons of overflow discharge. This estimate is calculated from the time the crew received the call until the time it was resolved.

Cause of Noncompliance: NATURAL CAUSES OF GREASE BUILD-UP & SAND & SEDIMENT

Duration: Start Date and Time: 7/18/14 11:00 am
End Date and Time: 7/18/14..... 12:00 pm
Or Date Expected to be corrected:7/18/14

Potential Danger to Human Health and Safety or the Environment: NONE

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☐ Yes ☐ No Field Measurements

☐ Yes ☐ No Laboratory Samples

☐ Yes ☐ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects:

DISINFECTION BY FLUSHING HYDRANT, USING GRANULAR DEODORIZORS.

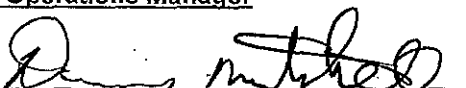
Actions Taken to Correct the Problem and Prevent Recurrence: THE CREWS WILL ROUTINE CLEAN THE UP-STREAM AND DOWN-STREAM MANHLOES USING DEGREASERS. IF NECESSARY A TV INSPECTION WILL BE APPLIED.

Verification Information

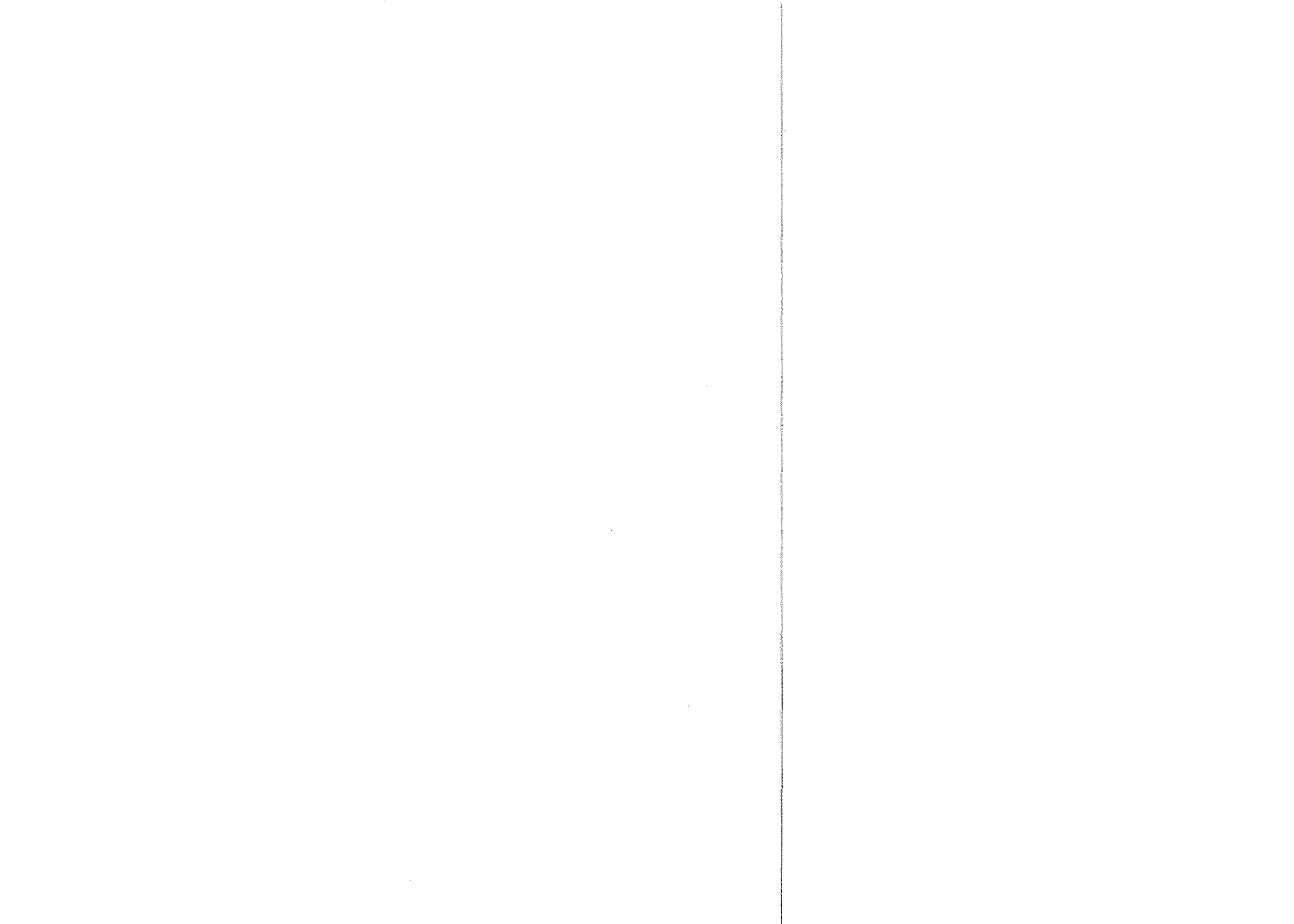
Information Reported By (Name/Title): Danny Mitchell, Field Operations Manager

Date Reported: 7/18/2014

Signature:



Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.



Water Quality Noncompliance Notification

☒ Unauthorized Discharge

☐ Reportable Effluent Violation

☐ Other

General Information

Entity Name: CITY OF BEDFORD

Telephone No: (X) (817) 952-2224

☒ Permittee ☐ Subscriber

TCEQ Region: 4

County: TARRANT

Permit Number*: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume if an unauthorized discharge):

The manhole at 1609 Hospital Park Way discharged for approximately 1 hour. Put out disinfect Flushed hydrant for 30 min. and odor control. 30 gallons of overflow discharge. This estimate is calculated from the time the crew received the call until the time it was resolved.

Cause of Noncompliance: NATURAL CAUSES OF GREASE BUILD-UP & SAND & SEDIMENT

Duration: Start Date and Time: 7/16/14 11:00 am
End Date and Time: 7/16/14..... 12:00 pm
Or Date Expected to be corrected:7/16/14

Potential Danger to Human Health and Safety or the Environment: NONE

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☐ Yes ☐ No Field Measurements

☐ Yes ☐ No Laboratory Samples

☐ Yes ☐ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects:

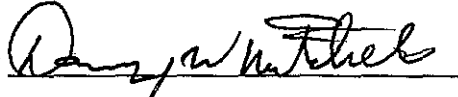
DISINFECTION BY FLUSHING HYDRANT, USING GRANULAR DEODORIZORS.

Actions Taken to Correct the Problem and Prevent Recurrence: THE CREWS WILL ROUTINE CLEAN THE UP-STREAM AND DOWN-STREAM MANHLOES USING DEGREASERS. IF NECESSARY A TV INSPECTION WILL BE APPLIED.

Verification Information

Information Reported By (Name/Title): Danny Mitchell, Field Operations Manager

Date Reported: 7/16/2014

Signature: 

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

[illegible]

Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford
952-2224

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):

The Manhole at 312 Gentry Way discharged for approximately 1 hour. Ran the main line and got it down and flowing. Approximately 40 gallons overflowed. This estimate is calculated from the time the crew received the call until the time it was resolved.

Cause of Noncompliance: Discharge was caused by grease in the main. Main was not completely blocked still had flow down stream.

Duration: Start Date and Time: 08-30-14 10:00am
End Date and Time: 08-30-14 11:00am
Corrected: 08-30-14

Or Date Expected to be

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements
☐ Yes ☒ No Laboratory Samples
☐ Yes ☒ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Sucked up overflow and returned it to the system.

Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned the main at the time of repair. Will clean the line again and monitor.

Verification Information

Information Reported By (Name/Title): Dan Mitchell Utility manager.

Date Reported: 9-8-2014

Signature: 

Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City of Bedford

Telephone No: (817) 952-2223

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: TARRANT

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):

The manhole AT 2001 PARK PLACE OVER FLOWED. The flow WAS NORTH AND entered A storm drain. IT WAS THEN directed TO A creek going TO THE east. There was ABOUT 40 gallons in the creek.

Cause of Noncompliance:

The stop was grease and sand and sediment

Duration: Start Date and Time: 12:30 PM 10-2-14

End Date and Time: 11:00 PM 10-2-14 Or Date Expected to be Corrected:

Potential Danger to Human Health and Safety or the Environment:

None

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements

☐ Yes ☐ No Laboratory Samples

☐ Yes ☐ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Cleaned main line. And flush main.

Flush hydrant to dilute overflow in creek and sprayed disinfection.

Actions Taken to Correct the Problem and Prevent Recurrence: will clean ⁱⁿ the area
and monitor.

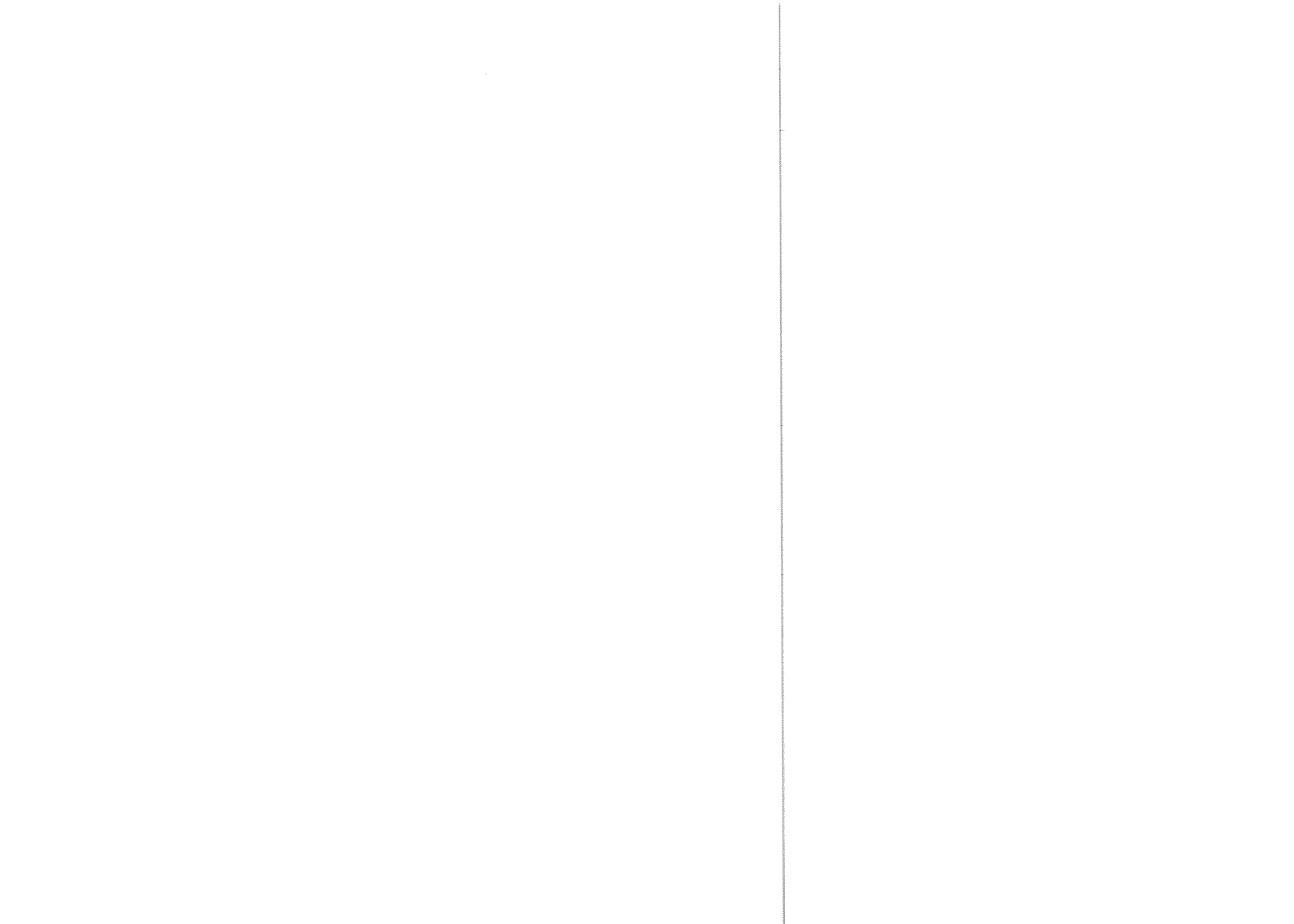
Verification Information

Information Reported By (Name/Title): Dan Mitchell Utility Manager.

Date Reported: 10-2-14 Signature: Danny W Mitchell

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

* If the noncompliance is an unauthorized discharge from a wastewater collection system, use the permit number of



Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford
952-2224

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):
The man hole at Lincoln Shire and Lincoln Shire Circle was over flowing. The overflow went south on Lincoln Shire to Rolling Meadows. Then east on Rolling Meadows to a storm drain. About 60 gallons estimated.

Cause of Noncompliance: Discharge was caused by a grease plug in the main.

Duration: Start Date and Time: 10-05-2014 07:15am
End Date and Time: 10-05-2014 07:45am
Corrected: 10-05-2014

Or Date Expected to be

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements
☐ Yes ☒ No Laboratory Samples
☐ Yes ☒ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Flushed hydrant for 30 min.

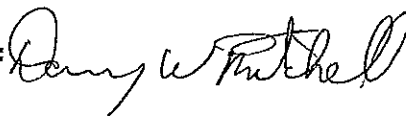
Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned the main at the time of repair. Will clean the line again and monitor.

Verification Information

Information Reported By (Name/Title): Dan Mitchell Utility manager.

Date Reported: 10-07-2014

Signature:



Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford
952-2224

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):
The man hole at 812 Glenda Dr. was overflowing. It ran to the East along the curb to a storm inlet. There was about 60 gallons of discharge. They flushed a fire hydrant for 30 minuets after the stop was cleared.

Cause of Noncompliance: Discharge was caused by a grease plug and roots in the main

Duration: Start Date and Time: 10-16-2014 02:00pm
End Date and Time: 10-16-2014 03:00pm
Corrected: 10-16-2014

Or Date Expected to be

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements
☐ Yes ☒ No Laboratory Samples
☐ Yes ☒ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Flushed hydrant for 30 min.

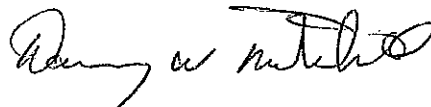
Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned the main at the time of repair. Will clean the line again and monitor.

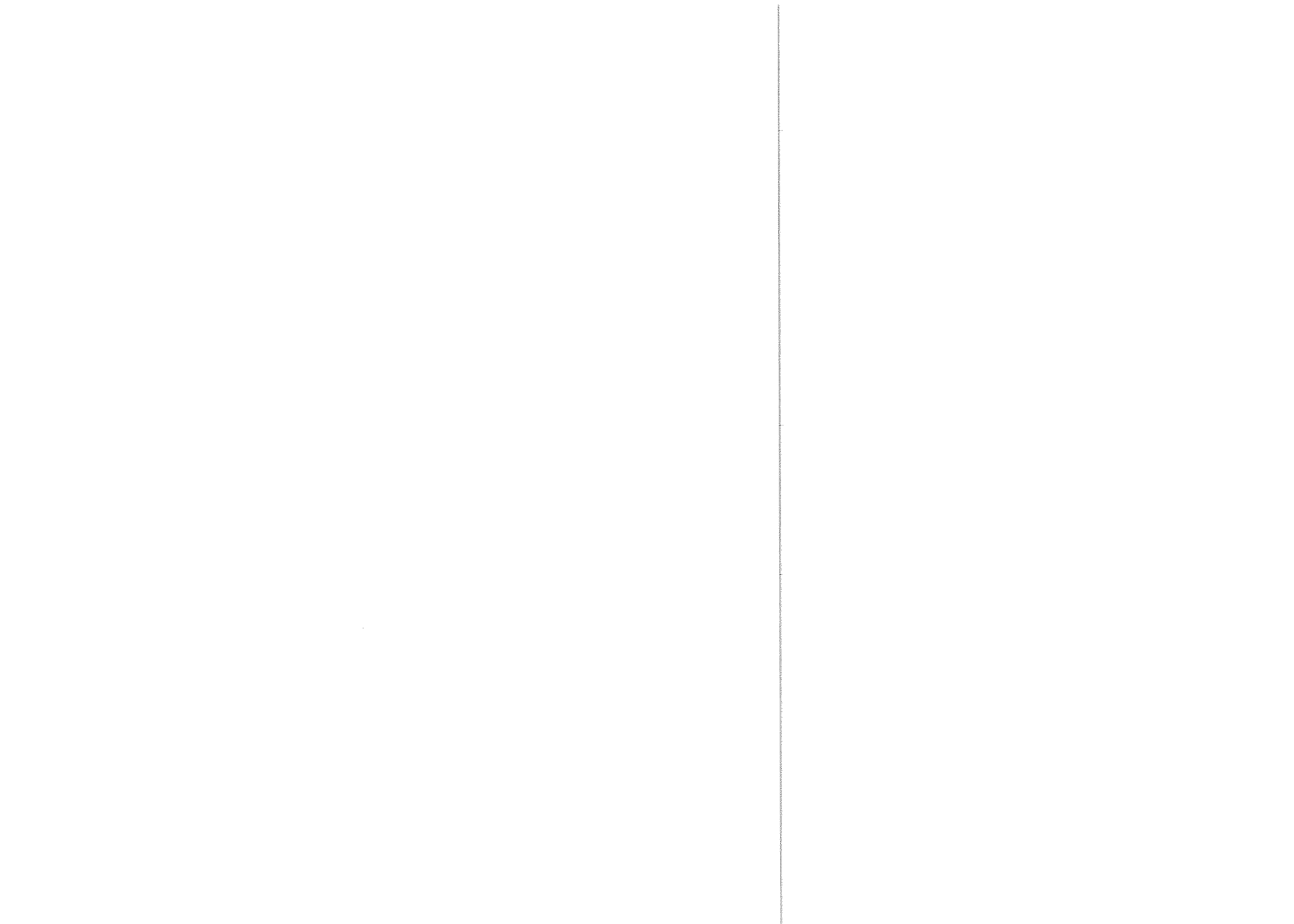
Verification Information

Information Reported By (Name/Title): Dan Mitchell Utility manager.

Date Reported: _10-18-2014_

Signature:





Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford
952-2224

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):

The man hole at 2510 Meadow Park Circle was overflowing to the east into a creek. The cause of the over flow was a grease plug in the main. There was about one thousand gallons discharged.

Cause of Noncompliance: Discharge was caused by a grease plug in the main.

Duration: Start Date and Time: 10-26-2014 12:00 pm
End Date and Time: 10-26-2014 02:45 pm
Corrected: 10-26-2014

Or Date Expected to be

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements

☐ Yes ☒ No Laboratory Samples

☐ Yes ☒ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Sand bagged the channel to stop the flow. Set up pumps to return the spill to the sewer system. Pumped the channel and flushed hydrants until the flow was clear. We sprayed deoderat and dissenfctant in the area where overflow occurred.

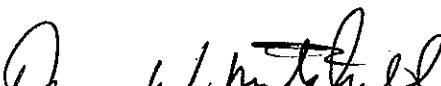
Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned the main at the time of repair. Will clean the line again and monitor.

Verification Information

Information Reported By (Name/Title): Dan Mitchell Utility manager.

Date Reported: 10-27-2014

Signature:



Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford
952-2223

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):
The man hole at the intersection of Pipeline and Chateau Val lee was overflowing as well as the clean out in the customer's service in the yard. The flow from the clean out collected in the yard in the grass area. The flow from the man hole ran east to the storm drain. After unstopping the main and service the over flow in the grass was sucked up and returned to the system. The flow from the manhole was flushed and diluted with a fire hydrant.

Cause of Noncompliance: Discharge was caused by grease and soap in the main.

Duration: Start Date and Time: 09-27-14 08:00am
End Date and Time: 09-27-14 10:00am
Corrected: 09-27-14

Or Date Expected to be

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

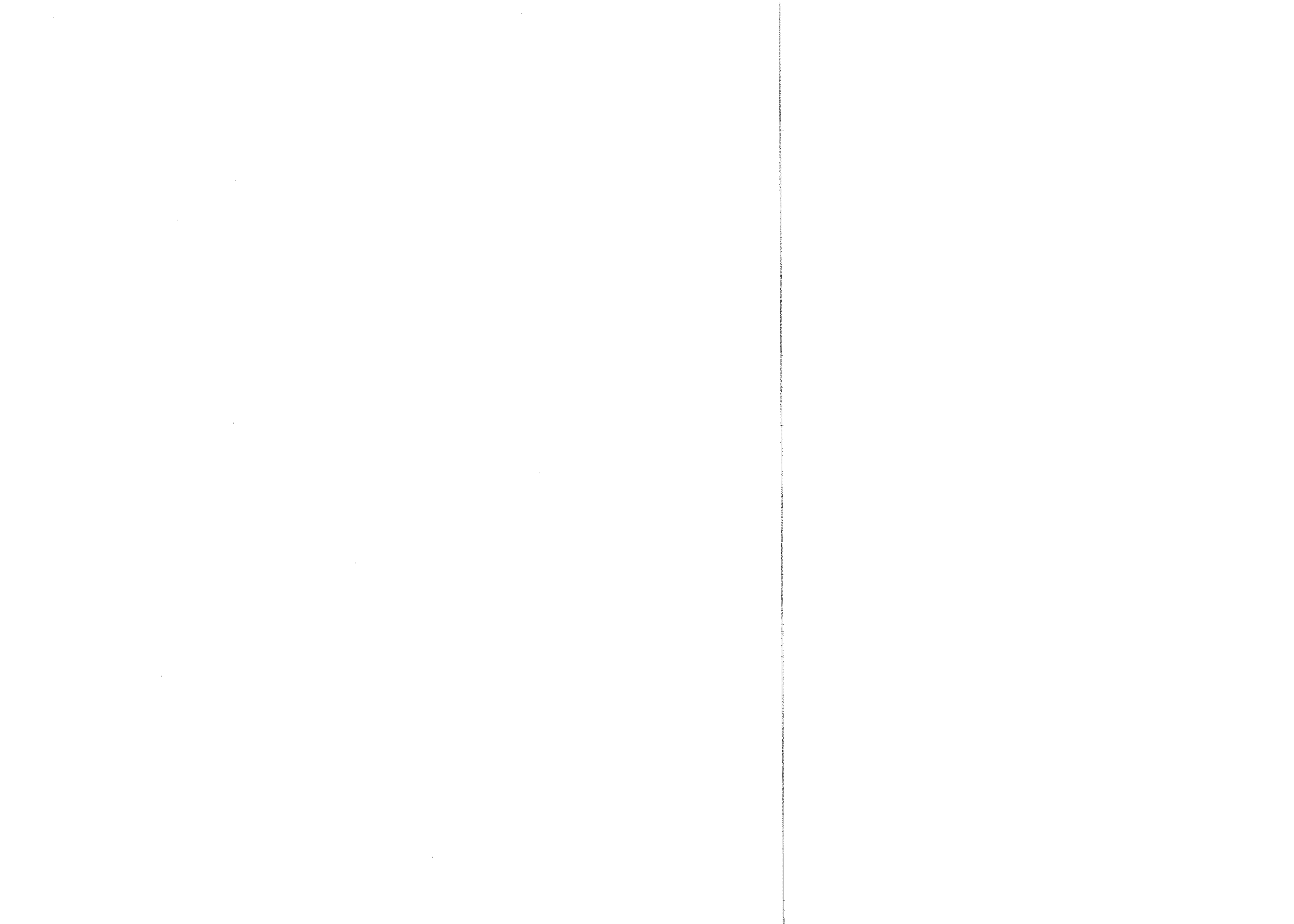
☒ Yes ☐ No Field Measurements
☐ Yes ☒ No Laboratory Samples
☐ Yes ☒ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Sucked up overflow from grass area and returned it to the system. Sprayed with disinfection and deodorant. The flow from the man hole was flushed for dilution with a fire hydrant for 30 minutes.

Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned the main at the time of repair. Will clean the line again and monitor.

Verification Information

Information Reported By (Name/Title): Dan Mitchell Utility manager.



Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge ☒ Reportable Effluent Violation ☐ Other

General Information

Entity Name: City Of Bedford
952-2224

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):
The man hole at Lexington place and Wileman Dr. was over flowing. The overflow went east into a storm drain. Some of the water went back into the manhole and we flushed the creek for thirty minutes with dechlorinated water. Overflow was estimated at 80 gallons.

Cause of Noncompliance: Discharge was caused by a grease plug in the main.

Duration: **Start Date and Time:** 12-26-2014 9:30 am
End Date and Time: 12-26-2014 11:00 am
corrected: 12-26-2014 **Or** **Date Expected to be**

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No **Field Measurements**
☐ Yes x ☐ No **Laboratory Samples**
☐ Yes x ☐ No **Fish kill if yes, estimated number killed:**

Actions Taken to Mitigate Adverse Effects: Cleaned up water and products around manhole and in street. Flushed hydrant for 30 min.

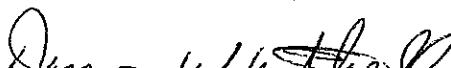
Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned the main at the time of repair. Will clean the line again and monitor.

Verification Information

Information Reported By (Name/Title): Dan Mitchell Utility manager.

Date Reported: 12-26-2014

Signature:



Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford
952-2223

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (includes location, discharge route, and estimated volume of unauthorized discharge):

The manhole at 832 Ridge Dr. was overflowing and it ran down the street to the west to Spring Grove. The water ran North on Spring Grove then between the houses to a creek. Some of the water was returned to the system and the rest was flushed with a hydrant. There was about 200 gallons involved. We cleaned about 300 feet of main that was full of grease.

Cause of Noncompliance: Discharge was caused by grease and soap in the main.

Duration: Start Date and Time: 12-27-14 10:00am
End Date and Time: 12-27-14 11:30am
corrected: 12-27-14

Or Date Expected to be

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements

☐ Yes ☒ No Laboratory Samples

☐ Yes ☒ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Sucked up overflow from grass area and returned it to the system. Sprayed with disinfection and deodorant. The flow from the man hole was flushed for dilution with a fire hydrant for 30 minutes.

Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned the main at the time of repair. Will step clean the line again and monitor.

Verification Information

Information Reported By (Name/Title): Dan Mitchell Utility manager.

Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford
952-2223

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):

The man hole at 2001 park place was overflowing. It ran down the curb line to a storm inlet box at the creek. Ran the main from the down stream manhole and broke the stop. Cleaned the line after the stop was removed and turned in to have the line TV'ed. Cleaned up standing water and flushed a fire hydrant for thirty minutes. Sprayed disinfectant for Oder.

Cause of Noncompliance: Discharge was caused by grease and soap in the main.

Duration: Start Date and Time: 10-11-2014 10:30 am
End Date and Time: 10-11-2014 11:00 am
Corrected: 10-11-2014

Or Date Expected to be

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements
☐ Yes ☒ No Laboratory Samples
☐ Yes ☒ No Fish Kill If yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Sucked up overflow from grass area and returned it to the system. Sprayed with disinfectant and deodorant. The remaining flow from the man hole was flushed for dilution with a fire hydrant for 30 minutes.

Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned the main at the time of repair. Will clean the line again and monitor. Will tv the line to look for problems in the main.

Verification Information

Information Reported By (Name/Title): Dan Mitchell Utility manager.

Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford
952-2224

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):

The manhole at 2901 Everest overflowed. The manhole is low and held most of the overflow. Some ran south and entered the storm drain (about 25%). Ran the main from Harwood 100 feet to clear a grease plug. Opened the man hole at 2901 Everest and swept overflow back into the manhole. Sprayed disinfectant on over flow area and flushed the storm drain for fifteen minutes with dechlorinated water from a hydrant.

Cause of Noncompliance: Discharge was caused by Grease blockage.

Duration: Start Date and Time: 11-21-15 11:30AM
End Date and Time: 11-21-15 12:30PM
corrected: 11-21-15

Or Date Expected to be

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements

☐ Yes ☒ No Laboratory Samples

☐ Yes ☒ No Fish kill if yes, estimated number killed:

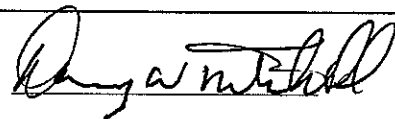
Actions Taken to Mitigate Adverse Effects: Cleaned up water and products around manhole and in street.
Flushed for fifteen minutes from a Hydrant and dechlorination diffuser

Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned main and inspected will monitor

Verification Information

Information Reported By (Name/Title): Danny Mitchell Utility Manager.

Date Reported: 11-21-15



Signature:

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEO

Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford
952-2224

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):

The manhole at 828 Ridge Dr. was overflowing. It was flowing at a rate of about 1.5 gallons a minute. The manhole was back of the curb. The flow went over the curb and flowed west on Ridge Dr. then crossed the street at Spring Grove Dr. The flow then entered the storm sewer which led to the creek behind the houses. We cleaned up the standing water and paper products. Then we flushed with dechlorinated water for ten minutes.

Cause of Noncompliance: Discharge was caused by Grease and Soap blockage.

Duration: Start Date and Time: 11/09/2015 10:00PM
End Date and Time: 11/09/2015 11:00PM
corrected: 11/09/2015

Or Date Expected to be

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements

☐ Yes ☒ No Laboratory Samples

☐ Yes ☒ No Fish kill if yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Cleaned up water and products around manhole and in street. Flushed for Ten minutes from a Hydrent and dechlorination diffuser

Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned main and inspected will monitor

Verification Information

Information Reported By (Name/Title): Danny Mitchell Utility Manager.

Date Reported: 11-11-2015

Signature:



Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ

Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☒ Unauthorized Discharge

☐ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford

Telephone No: (817) 952-2224

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):

The manhole at 3829 Berkshire Ln in the TXU Easement was overflowing into a creek. The cause of the over flow was a grease plug in the main. There was about two thousand gallons discharged.

Cause of Noncompliance: Discharge was caused by a grease plug in the main.

Duration: Start Date and Time: 07-10-2015, 06:00 pm
End Date and Time: 07-10-2015, 11:00 pm
Or Date Expected to be Corrected: 07-10-2015

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements

☐ Yes ☒ No Laboratory Samples

☐ Yes ☒ No Fish Kill If yes, estimated number killed:

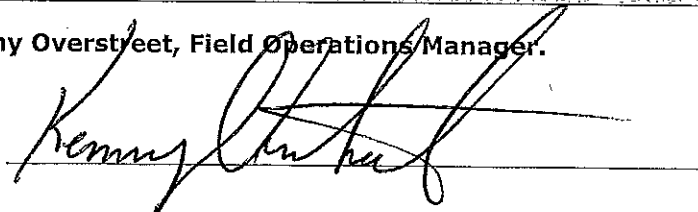
Actions Taken to Mitigate Adverse Effects: Creek had a Small damn before it entering small lake. City pumped creek dry flushed and re-pumped. Applied deodorizer and flushed hydrant with de-clor to refill creek. Returned 90 percent back to the sewer system.

Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned 1000' of main that evening, Set up to clean basin and TV mains of deficiencies.

Verification Information

Information Reported By (Name/Title): Kenny Overstreet, Field Operations Manager.

Date Reported: 07/14/2015

Signature: 

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford

Telephone No: 8179522200

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):
Manhole at 7 Morrow Overflowed 5-4-15 @745p overflowed till @11p...Crew estimated @450gal Overflow... 5-5-15 7a-1230p @350 gal Overflowed. Sewer Cleaning Crew found same MH overflowing. We TV'ed line found asphalt from street rehab stopping up MH. Contractor pumped out sewer line from MH to MH, we vactored out asphalt... Sewer water flowed to Timber Green where it entered storm box inlet, storm pipe flows east to grass channel, City Crew pumped out Creek & disinfected area....

Cause of Noncompliance: Discharge was caused by Contractor doing street rehab.

Duration: **Start Date and Time:** 5-4-2015 7:45 am- 11p
End Date and Time: 5-5-2015 7:00 am - 12:30p
to be corrected: 5-5-2015

Or **Date Expected**

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No **Field Measurements**

☐ Yes ☒ No **Laboratory Samples**

☐ Yes ☒ No **Fish kill** if yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Cleaned up water and products around manhole and in street. Pumped out Creek & flushed from fire hyd., also used declor. tabs & disinfected.

Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned asphalt out of MH & cleaned line.

Verification Information

Information Reported By (Name/Title): Paul Rosalez, Wastewater Crew Leader.

Date Reported: 5-5-2015

Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: CITY OF BEDFORD Telephone No (#####): (817) 952-2200

☒ Permittee TCEQ Region: 4 County: TARRANT *Permit Number: WQ 0010303-01
☐ Subscriber

Noncompliance Summary

Description and Cause of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):

MANHOLE AT WINDMILL TERRACE BETWEEN BUILDINGS 16 AND 20 OVERFLOWED SOUTH TO DRAIN IN CREEK. BLOCKED CREEK WITH SANDBAGS TO PREVENT CONTAMINATION. (AN SEWER MAN 250 FT TO CLEAR BLOCKAGE. THEN PUMPED WATER FROM CREEK BACK TO MANHOLE, AND FLUSHED WITH 18,000 GALLONS OF DECHLORINATED WATER FROM NEAREST HYDRANT. WILL MONITOR PROBLEM TO PREVENT FUTURE BACKUPS. ADDRESS TO APTS IS 2200 MURPHY DR. 250 GALLONS OF DISCHARGE

Duration:

Start Date: 2-16-15 End Date: 2-16-15 Or Date Expected to be Corrected:

Time: 4:15pm Time: 6:15pm

Potential Danger to Human Health and Safety or the Environment: NONE

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

Field Measurements

Laboratory Samples

Fish Kill (If yes, estimated number killed):

☒ Yes ☐ No

☐ Yes ☒ No

☐ Yes ☒ No

Actions Taken to Mitigate Adverse Effects:

BLOCKED CREEK WITH SANDBAGS PUMPED WATER BACK TO SEWER SYSTEM, THEN FLUSHED WITH 18,000 GALLONS OF DECHLORINATED WATER FROM NEAREST HYDRANT.

Actions Taken to Correct the Problem and Prevent Recurrence:

(AN SEWER MAIN TO NEXT MANHOLE 250 FT CLEANED GREASE BLOCKAGE, WILL CLEAN MAIN AGAIN + MONITOR GREASE PROBLEM

Verification Information

Information Reported By (Name/Title): KEVIN JACKSON / crew leader

Date Reported: 2-17-15

Signature: [Signature]

Note: If this form is being used for a 5-day written report, a copy of the form should be sent to the TCEQ Region Office, and the original to: TCEQ, Compliance Monitoring Team (MC224), Enforcement Division, P.O. Box 13087, Austin, TX 78711-3087.

Water Quality Noncompliance Notification

See back of Form for Guidance for Completion

☐ Unauthorized Discharge

☒ Reportable Effluent Violation

☐ Other

General Information

Entity Name: City Of Bedford
952-2224

Telephone No: (817)

☒ Permittee

☐ Subscriber

TCEQ Region: 4

County: Tarrant

*Permit Number: WQ-0010303-01

Noncompliance Summary

Description of Noncompliance (include location, discharge route, and estimated volume of unauthorized discharge):
The man hole at 2701 Arbor Ct. was over flowing in the easement. The water was running into the storm channel and running to the north towards Cheek Sparger. We contained the flow at Cheek Sparger and pumped back into the system. Flushed fire hydrant for cleanup. There was about 450 gallons discharged at a rate of about 3.5 gallons a minute.

Cause of Noncompliance: Discharge was caused by a grease plug in the main.

Duration: Start Date and Time: 01-26-2015 9:30 am
End Date and Time: 01-26-2015 11:30 am
corrected: 01-26-2015

Or Date Expected to be

Potential Danger to Human Health and Safety or the Environment: none

Actions Taken

Monitoring Data: Data should be attached or submitted to TCEQ when available.

☒ Yes ☐ No Field Measurements

☐ Yes ☒ No Laboratory Samples

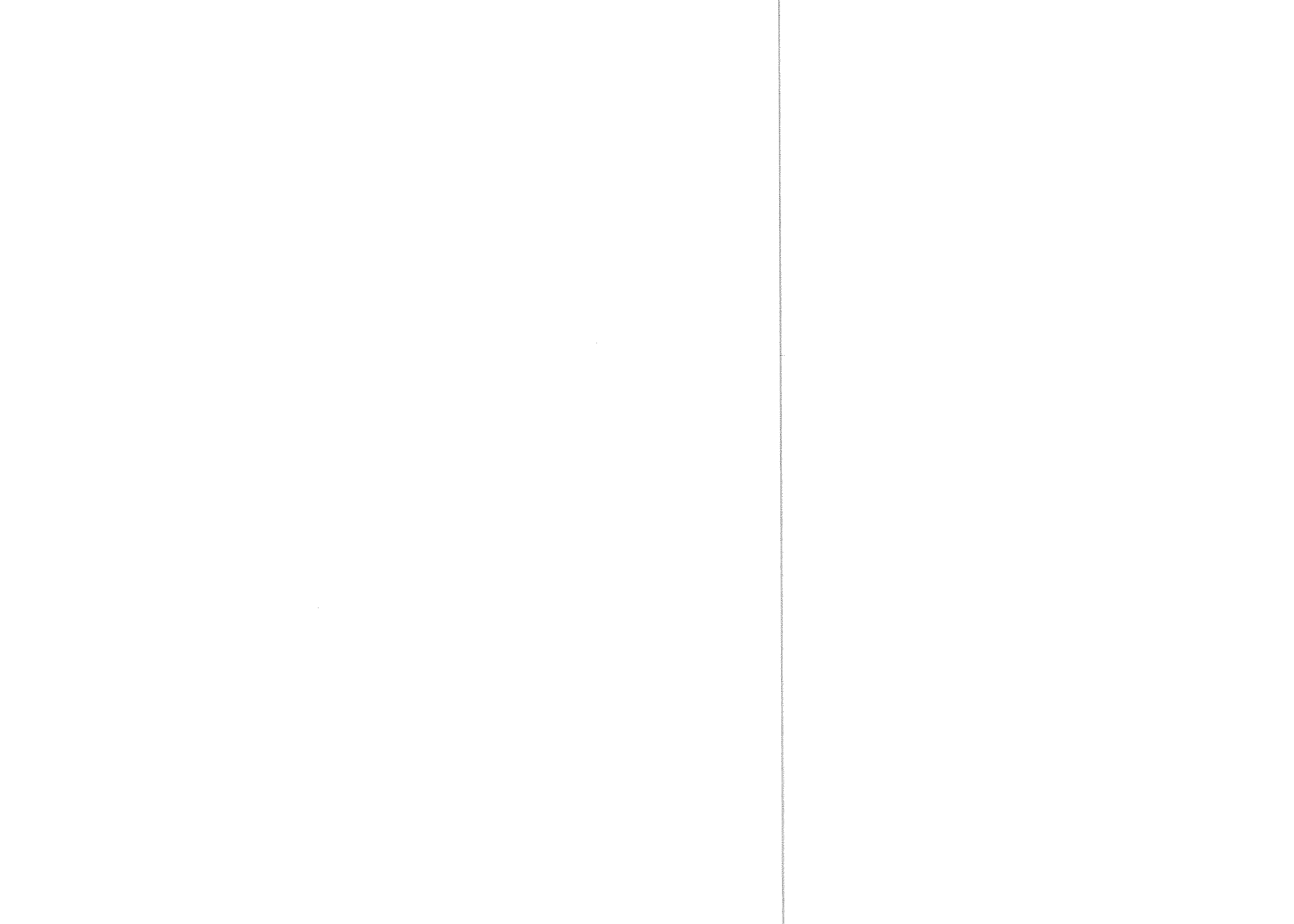
☐ Yes ☒ No Fish kill if yes, estimated number killed:

Actions Taken to Mitigate Adverse Effects: Cleaned up water and products around manhole and in yard. Flushed hydrant and pumped channel after containment.

Actions Taken to Correct the Problem and Prevent Recurrence: Cleaned the main at the time of repair. Will clean the line again on Tuesday with another truck and monitor.

Verification Information

Information Reported By (Name/Title): Dan Mitchell Utility manager.



Appendix 2B - City of Bedford Supplied Documents
City of Bedford 2008 Sanitary Sewer Condition Assessment



CITY OF
BEDFORD
TEXAS

12/30/2013

CERTIFIED MAIL – RETURN RECEIPT
7012 0470 0000 1453 9663

Ms. Mary Matl
Order Compliance Team
Enforcement Division, MC 149A
Texas Commission on Environmental Quality (TCEQ)
P.O. Box 13087
Austin, Texas 78711-3087

RE: Sanitary Sewer Overflow Initiative
City of Bedford City Collection System, Bedford (Tarrant County) Texas
RN 101388981 Enforcement Case No. 35291

The Sanitary Sewer Overflow (SSO) Initiative Enforcement Case No. 35291 expires on December 31, 2013. The implementation of wastewater improvements within the sanitary sewer system has provided a positive impact for the City of Bedford. Therefore, in accordance with Provision 12 of the Agreement between the City and the TCEQ which was effective February 27, 2008, the City requests an extension of this SSO Initiative for five years until December 31, 2018.

The City will continue to report annually on Provisions 4, 5, 6, 7, 8, and 9 which includes a five-year Capital Improvements Plan (CIP).

The following chart shows a brief synopsis of each corrective action completed and not completed in accordance with the Agreement.

PROV.	TCEQ SSOI	STATUS
1	Complete Comprehensive WW Collection System Evaluation by July 31, 2008.	COMPLETED.
2	Evaluate Feasibility of Chemical Root Control Program by December 31, 2008.	COMPLETED.
3	Develop Geographic Information System (GIS) Database by July 31, 2008.	COMPLETED.
4	Inspect 20% of Existing Manholes in the System and Conduct Rehabilitation as Necessary on an Annual Basis.	MET Expectations Annually.
5	Clean 20% of SS System on an Annual Basis.	MET Expectations Annually.
6	Video at least 14,000 Feet of SS System on an Annual Basis.	MET Expectations Annually.

PROV.	TCEQ SSOI	STATUS
7	Implement Annual CIP to Replace Existing SS System Infrastructure by December 13, 2013.	ONGOING. Outfall SS serving Brook Hollow and Shady Brook were COMPLETED. (Projects were prioritized into a 5-Year CIP with \$1M annual expenditures based on cost effectiveness.)
8	Implement an Education Program to Residential Customers for Disposal of Grease on an Annual Basis.	ONGOING. MET Expectations Annually.
9	Implement Plan to Evaluate Effectiveness of WW Improvements and Report Annually the Progress of the 5-Year CIP.	MET Expectations Annually. (Continue 5-year plan to rehab SS system with \$1M annually.)
10	Submit Progress Report to Commission 90 Days from Effective Date of Agreement.	COMPLETED.
11	Submit Final Report with Summary of Corrective Actions Completed and Not Completed in Accordance with the Provisions.	DUE 12/31/2013.
12	City can Request an Extension from Executive Director.	Staff recommends an extension of 5-years for Bedford to remain under TCEQ SSOI.

DETAILED INFORMATION FOR FINAL REPORT

PROVISION 11: By December 31, 2013, the City shall submit a written Final Report that contains the following:

A summary of all corrective actions that have been completed and not completed in accordance with the Provisions in this Agreement;

Provision 1: By July 31, 2008, the City shall complete a Comprehensive Wastewater Collection System Evaluation to address deficiencies within the System, as well as future projects to meet development needs.

Report Type / Date	Action
Progress / May 2008	The City is currently contracted with Espey Consultants to complete the Comprehensive Wastewater Collection System Evaluation per Provision 1.
Annual / 2008	The City conducted a Comprehensive Wastewater Collection System Evaluation in a contract with Espey Consultants, Inc. The final report was delivered in September 2008. The City is currently evaluating the findings of the report and prioritizing potential projects. The Public Works Wastewater Division identified numerous locations where the sanitary sewer system was in need of rehabilitation and/or reconstruction. Funds were allocated for this work in the 2007 Wastewater Certificates of Obligation. The four locations with the highest priority were as follows: Central Drive and Shoalmont Drive

Report Type / Date	Action
	• Block 1, Nottingham Addition and Block 7, Bedford Court Addition • Manholes and appurtenances at Spring Valley and Simpson Terrace, and Simpson Terrace and Stephenson Drive • Block 1, Shady Brook Addition The City has contracted with Elliot and Hughes, Inc. and is currently in the engineering plan design phase.
Annual / 2009	The City conducted a Comprehensive Wastewater Collection System Evaluation in a contract with Espey Consultants, Inc. The final report was delivered in September 2008. The Public Works Wastewater Division identified numerous locations where the sanitary sewer system was in need of rehabilitation and/or reconstruction. Funds were allocated for this work in the 2007 Wastewater Certificates of Obligation. Several locations were prioritized and several of these areas were addressed during this reporting period: • Manholes and appurtenances at Spring Valley and Simpson Terrace. • Block 1, Shady Brook Addition The City contracted with Elliot and Hughes, Inc. The design phase is complete and these projects will go to bid in the next thirty days. These areas are as follows: • Central Drive and Shoalmont Drive • Block 1, Nottingham Addition and Block 7, Bedford Court Addition
Annual / 2010	The City conducted a Comprehensive Wastewater Collection System Evaluation (CWCSE) in a contract with Espey Consultants, Inc. The final report was delivered in September 2008. The Public Works Wastewater Division identified numerous locations where the sanitary sewer system was in need of rehabilitation and/or reconstruction. Funds were allocated for this work in the 2007 and 2009 Wastewater Certificates of Obligation. Several locations were prioritized and several of these areas were addressed during this reporting period: • The City authorized an Infiltration/Inflow Investigation in TRA 19.1W drainage area, which is the largest in the City. The report is scheduled for completion in 2011 • The City authorized preparation of plans and specifications for Segment II, Sulphur Branch Trunk Sewer. This segment was identified as a priority in the CWCSE. • The following sewer projects were completed in 2010: ◦ Sanitary Sewer Infiltration/Inflow Study (Shady Brook/Brook Hollow areas) ◦ Sanitary Sewer Rehab/Reline Job (Brown Trail areas - Bell Hurst, West Bell View) ◦ Woodland Terrace Street Improvements (Repaired/replaced various house services and main line sewers) ◦ Ravenswood Dr Street Improvements (Repaired/replaced various house services and main line sewers) ◦ Somerset Circle Sewer Rehab Job (Replaced/upgraded the

Report Type / Date	Action
	existing sewer mains to a larger size. Also replaced/rehabilitated several existing manholes in same area) o Sanitary Sewer Rehab Project (Replaced/upgraded various sewer mains to larger sizes on Shady Grove, Central Dr, Brown Trail, and Gettysburg areas. Also constructed/rehabilitated manholes as needed)
Annual / 2011	The City conducted a Comprehensive Wastewater Collection System Evaluation (CWCSE) in a contract with Espey Consultants, Inc. The final report was delivered in September 2008. The Public Works Wastewater Division identified numerous locations where the sanitary sewer system was in need of rehabilitation and/or reconstruction. Funds were allocated for this work in the 2007 and 2009 Wastewater Certificates of Obligation. Several locations were prioritized and several of these areas were addressed during this reporting period: • The City authorized an Infiltration/Inflow investigation in TRA 19.1W drainage area, which is the largest in the City. The project was completed in 2011 and it identified locations where inflow and infiltration was observed or is likely to occur during a storm water event. A Professional Services Contract has been entered into for the design of a section of sanitary sewer line renewal, point repairs and manhole rehabilitation indentified in the study. This project was funded through CIP funding. • The City authorized preparation of plans and specifications for Segment II, Sulphur Branch Trunk Sewer. The design of this project has been completed. The project will proceed when funding from the TWDB becomes available. • The following sewer projects were completed in 2011: - o Gettysburg Place and Oak Hill Drive Area (Repaired/replaced various house services and main line sewers). - o Central Drive and Shoalmont Dr Area (Repaired/replaced various house services and main line sewers). - o Shady Grove Drive and Shady Brook Drive Area (Repaired/replaced various house services and main line sewers). - o Repairs in the intersection of Simpson Terrace and Stephenson Drive.
Annual / 2012	The City conducted a Comprehensive Wastewater Collection System Evaluation (CWCSE) in a contract with Espey Consultants, Inc. The final report was delivered in September 2008. The Public Works Wastewater Division identified numerous locations where the sanitary sewer system was in need of rehabilitation and/or reconstruction. Funds were allocated for this work in the 2007 and 2009 Wastewater Certificates of Obligation. Several locations were prioritized and several of these areas were addressed during this reporting period: • The City authorized an Infiltration/Inflow investigation in TRA 19.1W drainage area, which is the largest in the City. The project was completed in 2011 and it identified locations where inflow and infiltration was observed or is likely to occur during a storm water

Report Type / Date	Action
	event. A Professional Services Contract has been entered into for the design of a section of sanitary sewer line renewal, point repairs and manhole rehabilitation identified in the study which was completed in 2012. The construction of this project was funded through CIP funding and will begin construction in 2013. • The City authorized preparation of plans and specifications for Segment 11, Sulphur Branch Trunk Sewer. Engineering was completed in 2012. The project will proceed when funding from the TWDB becomes available. • The following sewer projects were completed in 2012: ◦ Hurricane Creek at L. Don Dodson Drive (Repaired/replaced sanitary sewer creek crossing). ◦ Tributary SB-1 at Schumac Lane (Repaired/replaced sanitary sewer creek crossing). ◦ West Fork Hurricane Creek at Hospital Parkway (Repaired/replaced sanitary sewer creek crossing). ◦ 38th year CBDG funded replacement of residential sewer mains on Memphis Drive and Winchester Way
Annual / 2013	The City conducted a Comprehensive Wastewater Collection System Evaluation (CWCSE) in a contract with Espey Consultants, Inc. The final report was delivered in September 2008. The Public Works Wastewater Division identified numerous locations where the sanitary sewer system was in need of rehabilitation and/or reconstruction. Funds were allocated for this work in the 2007 and 2009 Wastewater Certificates of Obligation. Several locations were prioritized and several of these areas were addressed during this reporting period: • The City authorized an Infiltration/Inflow (I/I) investigation in TRA 19.1W drainage area, which is the largest in the City. The project was completed in 2011 and it identified locations where I/I was observed or is likely to occur during a storm water event. A Professional Services Contract for a portion of the design of a section of sanitary sewer line renewal, point repairs and manhole rehabilitation identified in the study which was completed in 2012 and construction of two of the projects was funded through CIP funding and constructed in 2013. • The City authorized preparation of plans and specifications for Segment 11, Sulphur Branch Trunk Sewer. Engineering was completed in 2012. • The following sewer projects were completed in 2013. ◦ Sulphur Branch Sewer, Segment 11 (Repaired/replaced sanitary sewer). ◦ 19.1W Outfall Sewer Rehabilitation (Repaired/replaced sanitary sewer).

Provision 2: By December 31, 2008, the City shall evaluate the feasibility of a chemical root control program. If the City determines a chemical root program to be effective, the City shall develop an on-going program for proposal in the City's 2009 budget. The results of the feasibility study shall be provided in accordance with Ordering Provision No. 10.

Report Type / Date	Action
Annual / 2008	In the past, the City of Bedford contracted with a company called Dukes Root Control to inject root inhibitor chemicals into lines. While this process was effective, the results only lasted a few years. The City researched alternative methods and determined that Cured In Place piping was more cost effective than a chemical root program because the effects last for decades. The City contracted with Insituform to utilize this rehabilitation method, which is funded through the Capital Improvement Program referred to in Provision 7.
Annual / 2009	As stated in Annual Report 2008, the City chose to use Cured in Place piping as its method of line rehabilitation. The City rehabbed the Shady Brook addition. This project was funded through the Capital Improvement Program referred to in Provision 7.
Annual / 2010	As stated in Annual Report 2008, the City chose to use Cured in Place Piping as its method of line rehabilitation. The attached map shows the areas improved through 2010. This project was funded through the Capital Improvement Program referred to in Provision 7.
Annual / 2011	As stated in Annual Report 2008, the City chose to use Cured in Place Piping (CIPP) as its method of line rehabilitation. There was only one CIPP project in 2011. This project was funded through the Capital Improvement Program referred to in Provision 7.
Annual / 2012	Memphis/Winchester sewer was pipe burst which reduced joints and root intrusion.
Annual / 2013	Sulphur Branch Sewer, Segment 11 sewer was pipe burst which reduced joints and root intrusion.

Provision 3: By July 31, 2009, the City shall develop a Geographic Information System ("GIS") database to include data and imagery of the System and System facilities. The GIS database shall be continually updated as information becomes available.

Report Type / Date	Action
Progress / May 2008	The City is currently contracted with the North Central Texas Council of Governments to develop a Geographic Information System ("GIS") database of the System and System facilities per Provision 3.
Annual / 2008	The City is approximately 45 to 50% complete in the development of the data and imagery for the City Geographic Information System ("GIS") database. The City is currently working with Espey Consultants, Inc to complete the initial system infrastructure. The GIS database shall be continually updated as information becomes available.
Annual / 2009	The City is approximately 80 to 90% complete in the development of the data and imagery for the City Geographic Information System (GIS) database. The GIS database is continually updated as information from field observances is reported.
Annual / 2010	The City is approximately 80 to 90% complete in the development of the data and imagery for the City Geographic Information System (GIS) database. Given funding restraints, there has been a delay in the installment of a new

Report Type / Date	Action
	server dedicated to GIS files. We expect to be 100% operational in the near future as soon as the new server is installed. The GIS database is continually updated as information from field observances is reported.
Annual / 2011	The City completed the development of the data and imagery for the City Geographic Information System (GIS) database in 2011. The GIS database is continually updated as information from field observances is reported.
Annual / 2012	Global Positioning System (GPS) update on manhole and cleanouts.
Annual / 2013	GPS update on manhole and cleanouts.

Provision 4: Beginning on the effective date of this Agreement, and on an annual basis thereafter, the City shall inspect 20% of the existing manholes in the system and conduct rehabilitation as necessary. The City shall provide the dates and locations of the inspections and include the locations, actions, and completion dates for manholes that were rehabilitated, in accordance with Ordering Provision No. 10 below.

Report Type / Date	Action
Progress / May 2008	The City has inspected 1% of the existing manholes in the system per Provision 4. Since February 2007, the City has inspected 20% of the existing manholes.
Annual / 2008	The City conducted 51 manhole inspections. This number represents only 2% of the total 2,750 manholes. When the staff began to compile manhole inspection reports we realized that these reports alone do not reflect the total number of manhole inspections conducted, because manholes are also inspected when lines are video inspected or during routine cleaning. Therefore, in order to correct this mistake the City is using a new database management program to begin keeping full record of inspection reports to be able to provide sufficient data next reporting period that meets the 20% annual minimum requirement for manhole inspections.
Annual / 2009	The City inspected 20% of the system manholes: 550 out of 2,750 total manholes. This meets the annual minimum requirement of 20% of the system lines.
Annual / 2010	The City inspected 20% of the system manholes: 554 out of 2,750 total manholes. This meets the annual minimum requirement of 20% of the system manholes.
Annual / 2011	The City inspected 20% of the system manholes: 562 out of 2,750 total manholes. This meets the annual minimum requirement of 20% of the system manholes.
Annual / 2012	During 2012, the City inspected 90.5% of the system manholes: 2,490 out of 2,750 total manholes. This meets the annual minimum requirement of 20% of the system manholes.
Annual / 2013	During 2013, the City inspected 18.5% of the system manholes: 509 out of 2,750 total manholes. This meets the annual minimum requirements of 20% of the system manholes. We anticipate completing this item prior to March 28, 2014.

Provision 5: Beginning on the effective date of this Agreement, and on an annual basis thereafter, the City shall clean at least 20% of the System lines.

Report Type / Date	Action
Progress / May 2008	The City has cleaned at least 5% of the system lines per Provision 5. Since February 2007, the City has cleaned approximately 20% of the system lines.
Annual / 2008	The City cleaned 23% of the system lines: 194,418 ft out of 830,000 total ft of system lines. This meets the annual minimum cleaning requirement of 20% of the system lines.
Annual / 2009	The City cleaned 27% of the system lines: 218,499 ft out of 830,000 total ft of system lines. This meets the annual minimum cleaning requirement of 20% of the system lines.
Annual / 2010	The City cleaned 20% of the system lines: 169,578 ft out of 830,000 total ft of system lines. This meets the annual minimum cleaning requirement of 20% of the system lines.
Annual / 2011	The City cleaned 23% of the system lines: 187,657 ft out of 830,000 total ft of system lines. This meets the annual minimum cleaning requirement of 20% of the system lines.
Annual / 2012	During 2012, the City cleaned 28% of the system lines: 214,893 ft out of 830,000 total ft of system lines. This does not meet the annual minimum cleaning requirement of 20% of the system lines.
Annual / 2013	During 2013, the City cleaned 19.4% of the system lines: 161,755 ft out of 830,000 total ft of system lines. This meets the annual minimum cleaning requirements of 20% of the system lines. We anticipate completing this item prior to March 28, 2014.

Provision 6: Beginning on the effective date of this Agreement, and on an annual basis thereafter on an annual basis, the City shall video at least 14,000 feet of the System.

Report Type / Date	Action
Progress / May 2008	The City is currently in the process of video inspecting at least 14,000 feet of the System per Provision 6.
Annual / 2008	The City video inspected 19,796 ft of system lines, which meets the annual minimum requirement of 14,000 ft of system lines.
Annual / 2009	The City video inspected 100,741 ft of system lines, which meets the annual minimum requirement of 14,000 ft of system lines.
Annual / 2010	The City video inspected 60,620 ft of system lines, which meets the annual minimum requirement of 14,000 ft of system lines.
Annual / 2011	The City video inspected 30,675 ft of system lines, which meets the annual minimum requirement of 14,000 ft of system lines.
Annual / 2012	During 2012, the City video inspected 29,590 ft of system lines, which meets the annual minimum requirement of 14,000 ft of system lines.

Report Type / Date	Action
Annual / 2013	During 2013, the City video inspected 23,349 ft of system lines, which meets the annual minimum requirements of 14,000 ft of system lines.

Provision 7: By December 13, 2013, the City shall implement the annual Capital Improvements Program to replace the existing System infrastructure within the following neighborhoods: Brook Hollow Addition; Harwood Terrace Addition; Rollingwood Addition; Bell Hurst Addition; Oakwood Park East Addition; Bell Manor Addition (North Section); and Shady Brook Addition. The funding for the program will be considered annually for approval by the City Council.

Report Type / Date	Action
Annual / 2008	The City is using the Capital Improvement Program to improve the existing System Infrastructure in the Shady Brook Addition. The City has contracted with Insituform and the project is budgeted at approximately \$800,000. The project is scheduled to begin February 23, 2009 with final completion in 210 calendar days.
Annual / 2009	The City is using the Capital Improvement Program (CIP) to improve the existing System infrastructure in several areas. During FY 08/09, the City focused on line rehab in Shady Brook Addition using Insituform (Cured in Place piping). CIP projects for FY 09/10 include the following: • Inflow and Infiltration Study (contracted with Gary Burton Engineering, Inc) • Rehab the Sulphur Branch trunk sewer line from Harwood to Pipeline and various line segments (Segment II and Somerset Circle) • Sanitary Sewer Crossings – Hurricane Creek Tributary, L. Don Dodson, Schumac and SB1, Hurricane Creek N. 183, Hurricane Creek & Hospital Parkway • Brown Trail Sewer Line Rehabilitation • Hurst – Bedford Connection Improvements Study
Annual / 2010	The City is using the Capital Improvement Program (CIP) to improve the existing System infrastructure in several areas. During FY 09/10, the City completed improvements in Brook Hollow addition, Bell Hurst addition, Kelmont addition, and Shady Brook addition.
Annual / 2011	The City is using the Capital Improvement Program (CIP) to improve the existing System infrastructure in several areas. During FY 10/11, the City completed improvements on Brown Trail from Belle Street to Hurst Drive (Sanitary sewer line replacement for the east side of the 900-1000 blocks of Brown Trail). Another completed CIP project was the Sanitary Sewer Creek Crossing Repairs (Hurricane Creek at L. Don Dodson Drive, West Fork Hurricane Creek at Hospital Parkway and Sulphur Branch Tributary at Schumac Lane).
Annual / 2012	• The City authorized preparation of plans and specifications for Segment 11, Sulphur Branch Trunk Sewer. Engineering was completed in 2012. The project will proceed when funding from the TWDB becomes available. • The following sewer projects were completed in 2012: ◦ Hurricane Creek at L. Don Dodson Drive (Repaired/replaced sanitary

Report Type / Date	Action
	sewer creek crossing). - o Tributary SB-1 at Schumac Lane (Repaired/replaced sanitary sewer creek crossing). - o West Fork Hurricane Creek at Hospital Parkway (Repaired/replaced sanitary sewer creek crossing). - o 38th year CBDG funded replacement of residential sewer mains on Memphis Drive and Winchester Way
Annual / 2013	• The following sewer projects were completed in 2013. - o Sulphur Branch Sewer, Segment 11 (Repaired/replaced sanitary sewer). - o 19.1W Outfall Sewer Rehabilitation (Repaired/replaced sanitary sewer).

Provision 8: The City will implement an educational program to all residential customers for the proper disposal of grease. On an annual basis, educational information will be included in the Bedford Connection, the residents' water bill, and uploaded to the City's website. The information will be available in English and Spanish.

Report Type / Date	Action
Progress / May 2008	The City is currently developing educational information to be placed in residential water bills and uploaded on to the City website per Provision 8.
Annual / 2008	The City put information on the website to educate the public on the proper disposal of grease in July 2008. Information will appear in resident water bill inserts or the Bedford Connection in March 2009. The new database management software referred to in Provision 4 will also help the staff to better manage tasks and deadlines. The information will be provided in both English and Spanish.
Annual / 2009	Information on the proper disposal of grease is available on the website and is updated periodically. Information was placed in the Bedford Connection in March 2009. The City switched from monthly newsletters to quarterly magazines. A F.O.G article was published in the first issue in January 2010. There will be a F.O.G. article published in every issue henceforth.
Annual / 2010	Information on the proper disposal of grease is available on the website and is updated periodically. F.O.G articles were placed in the quarterly Bedford Magazine in January, April, August and December in 2010. The Environmental Specialist attended an apartment managers meeting March 18, 2010 and gave a presentation geared towards proper disposal of grease by apartment residents. In July 2010, the Environmental Specialist delivered close to 500 grease funnels to apartment managers to provide to their residents. City staff also passed out another 500 grease funnels to residents and visitors at the Bedford Bluesfest, a two day blues festival in Bedford over Labor Day weekend. In September 2009 the City passed a liquid waste ordinance requiring all grease and grit trap owners, as well as liquid waste haulers to be registered with the City of Bedford. Grease and grit trap owners are required to use registered haulers and must evacuate their tanks every 90 days unless they request a variance.

Report Type / Date	Action
Annual / 2011	Information on the proper disposal of grease is available on the website and is updated periodically. F.O.G articles were placed in the quarterly Bedford Magazine in January, April, August and December in 2011. The Environmental Specialist collected used cooking oil from residents after the winter holiday season. The Environmental Specialist continued to provide apartment managers with grease funnels, as needed, to provide to their residents. City staff also passed out another 100 grease funnels to residents and visitors at the Bedford Bluesfest, a two day blues festival in Bedford over Labor Day weekend. The City purchased 8000 grease abatement door hangers that an Eagle Scout will hang at apartment complexes. That project is slated for FY 11/12. In September 2009 the City passed a liquid waste ordinance requiring all grease and grit trap owners, as well as liquid waste haulers to be registered with the City of Bedford. Grease and grit trap owners are required to use registered haulers and must evacuate their tanks every 90 days unless they request a variance.
Annual / 2012	Information on the proper disposal of grease is available on the website and is updated periodically. F.O.G articles were placed in the quarterly Bedford Magazine in January, April, August and December in 2012. The Environmental Specialist collected used cooking oil from residents after the winter holiday season and year round. The Environmental Specialist continued to provide apartment managers with grease funnels, as needed, to provide to their residents. City staff also passed out another 100 grease funnels to residents and visitors at the Bedford Bluesfest, a two day blues festival in Bedford over Labor Day weekend. The City purchased 8000 grease abatement door hangers that an Eagle Scout will hang at apartment complexes. That project is slated for FY 12/13. In September 2009 the City passed a liquid waste ordinance requiring all grease and grit trap owners, as well as liquid waste haulers to be registered with the City of Bedford. Grease and grit trap owners are required to use registered haulers and must evacuate their tanks every 90 days unless they request a variance.
Annual / 2013	Information on the proper disposal of grease is available on the website and is updated periodically. F.O.G. articles were placed in the quarterly Bedford Magazine in January, April, August, and December in 2013. The Environmental Specialist collected used cooking oil from residents after the winter holiday season and year round. The Environmental Specialist continued to provide apartment managers with grease funnels, as needed, to provide to their residents. City staff also passed out another 100 grease funnels to residents and visitors at the Bedford Bluesfest, a two-day blues festival in Bedford over Labor Day weekend. The City purchased 8,000 grease abatement door hangers that an Eagle Scout will hang at apartment complexes. That project is slated for FY 2013. In September 2009 the City passed a liquid waste ordinance requiring all grease and grit trap owners, as well as liquid waste haulers to be registered with the City of Bedford. Grease and grit trap owners are required to use registered haulers and must evacuate their tanks every 90 days unless they request a variance.

Provision 9: The City shall continue to implement its plan to evaluate effectiveness of the improvements. The plan includes, but is not limited to, continued televising and cleaning of lines, preventative maintenance, monitoring, and reporting. Staff will report annually to the City Council of the progress and rehabilitation of the sewer system under the 5-year plan.

Report Type / Date	Action
Annual / 2008	Staff will provide the Annual Report for 2008 to the City Council at the March 24 th Council meeting. Staff will be on hand to answer any questions.
Annual / 2009	Staff will provide the Annual Report for 2009 to the City Council at the March 23rd Council meeting. Staff will be on hand to answer any questions.
Annual / 2010	Staff will provide the Annual Report for 2010 to the City Council in the March 11th City Council Update.
Annual / 2011	Staff will provide the Annual Report for 2011 to the City Council in the March 13th City Council Update.
Annual / 2012	Staff will provide the Annual Report for 2012 to the City Council in the June 11th City Council Update.
Annual / 2013	Staff will provide the Annual Report for 2013 to the City Council at the January 14th City Council Update.

Improvements to the System

A description of the overall improvement the corrective actions had on the System.

- Have completed everything required by State for compliance. However, original agreement committed to eight neighborhoods and we have completed only about 50% of the work
- Major improvements were focused on creek crossing, parallel creek pipes, and manholes. The sanitary sewer improvements resulted in a reduction of flows by approximately 200,000 gallons per day in the 19.1W basin.
- The remaining work focuses on lines located within the previously identified subdivisions.
- Our requested extension puts our agreement in line with other DFW Metro cities around us. (Ten years is the normal.

Capital Improvements Program

The City implemented wastewater improvements throughout the collection system by prioritizing the various projects. Basin 19.1W (3.21 Square Miles) and 16.0W (2.06 Square Miles) are the two largest drainage basins in the City of Bedford. The 19.1W basin is the oldest outfall sanitary sewer in the City and is located adjacent to Sulphur Branch Creek which always flows water. Therefore, it was determined that this area shall receive top priority for repairs or replacement to eliminate both infiltration and sanitary sewer overflows.

The outfall sewer along Sulphur Branch Creek serving Brook Hollow and Shady Brook additions was completed in 2013. (See 19.1W meter station flow data.)

Wastewater lines were rehabilitated in Bell Manor, Brook Hollow, and Oakwood Park East. Harwood Terrace and Rollingwood additions are located in the upstream portions of their respective drainage basins and received the lowest priority for which funding was not available prior to the end of this SSOI dated December 31, 2013. The City fully intends to smoke test and televise these additions to determine if any deteriorated lines shall be replaced.

Grease Disposal

In September 2009 the City passed a Liquid Waste Ordinance requiring all grease and grit trap owners, as well as liquid waste haulers, to be registered with the City of Bedford. The work orders for grease stop have continued to decline as seen by the following chart:

<u>Work Order</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Grease Stops	56	39	27
Roots or Siltation Stops	161	41	49

The City continues to implement the televising and cleaning of portions of the collection system on an annual basis. These services have provided positive results and the City fully intends to continue this policy.

Infiltration Reduction

The City has implemented \$1 Million in capital improvements for the Wastewater Collection System. Rehabilitation to outfall sanitary sewer in Sulphur Branch serving the 19.1W basin has minimized the inflow which can be seen by the following chart:

TRA 19.1W METER STATION					
Month	2011 Flow	2012 Flow		2013 Flow	
	MGD	MGD	Rain Data (Inches/Month)	MGD	Rain Data (Inches/Month)
Dec	1.73	1.56	4.2	1.54	1.7
Jan	1.77	1.94	5.7	1.53	4.1
Feb	2.03	1.86	2.7	1.57	2.2
Mar	1.68	1.99	6.0	1.52	1.6
Apr	1.77	1.92	4.4	1.54	2.6
May	1.81	1.73	2.6	1.41	2.3
Jun	1.77	1.75	1.9	1.43	2.8
Jul	1.71	1.7	0.6	1.44	2.5
Aug	1.69	1.66	2.9	1.37	2.7
Sep	1.76	1.63	2.2	1.35	3.4
Oct	1.76	1.63	1.0	1.35	
Nov		1.56	0.1		

Therefore, the City of Bedford would like to extend our TCEQ SSOI until December 31, 2018 to further enhance our Wastewater Collection System.

The City continues to make progress in implementing the provisions mandated by the Compliance Agreement. Our staff looks forward to continue working with the TCEQ to ensure the City's compliance. If you have any questions, please contact me at (817) 952-2248 or Thomas.Hoover@BedfordTX.gov.

Sincerely



Thomas Hoover P. E.
Director Public Works



CC: Jeff Tate, Water Section Manager – TCEQ Region 4, Dallas/Fort Worth
Anthony Cepak, City Engineer – Gary Burton Engineering, Inc.
SSOI File

